

CLAIMS

1. A method of encoding video data, the method comprising:

generating a first set of data by encoding a first image of the video data;

5 generating one or more further sets of data by predictively encoding the first image, wherein the predictive encoding is performed with respect to a decoded version of the first image associated with a previously generated set of data;

10 in response to a user request which selects a further image from said video data, generating a first set of data representing the further image by predictively encoding the further image, wherein the predictive encoding is performed with respect to a decoded version of the first image associated with a previously generated set of data; and

15 generating one or more further sets of data representing the further image by predictively encoding the further image, wherein the predictive encoding is performed with respect to a decoded version of the further image associated with a previously generated set of data.

20 2. A method according to claim 1, wherein the first set of data representing the further image is generated by predictive encoding with respect to the decoded version of the first image associated with the immediately preceding generated set of data representing the first image.

25 3. A method according to claim 1 or 2 wherein each further set of data representing an image is generated by predictively encoding that image with respect to a decoded version of an image associated with the immediately preceding generated set of data.

30 4. A method according to claim 1, 2 or 3 wherein images are stored in a buffer for presentation for encoding on request of a user.

5. A method according to any preceding claim wherein the request for the further image represents a pre-determined time in the video data before or after the first image.

5 6. Video encoding apparatus, comprising a predictive encoder arranged:  
to encode a first set of data representing a first image;  
to encode one or more further sets of data representing the first image by  
predictively encoding the first image, wherein the predictive encoding is performed  
with respect to a decoded version of the first image associated with a previously  
10 generated set of data;

in response to the apparatus receiving a user request which selects a further  
image, to encode a first set of data representing the further image by predictively  
encoding the further image, wherein the predictive encoding is performed with  
respect to a decoded version of the first image associated with a previously  
15 generated set of data; and

to encode one or more further sets of data representing the further image by  
predictively encoding the further image, wherein the predictive encoding is  
performed with respect to a decoded version of the further image associated with a  
previously generated set of data.

20 7. A video surveillance system comprising:  
a video capture device;  
a video encoding apparatus according to claim 6 for encoding video signals  
received from the video capture device;

25 a user terminal including a video decoding device for decoding video signals  
received from the video encoding device and a user interface for a user to input  
commands to be sent to the video encoding device.

8. A video surveillance system according to claim 7 further including a buffer  
30 for storing images for presentation for encoding on request of a user.

9. A method of decoding video data, comprising:

receiving a first set of data representing a first image of the video data;

decoding the first set of data to generate a decoded version of a first image;

5 decoding further received sets of data representing the first image with reference to a previously decoded version of the first image;

sending to a transmitting encoder a user request which selects a further image from the video data;

10 decoding a received set of data representing the requested further image with reference to a previously decoded version of the first image so as to generate a decoded version of the further image; and

decoding further received sets of data representing the further image with reference to a previously decoded version of the further image.

15 10. A storage medium carrying computer readable code representing instructions for causing one or more computers to perform the method according to any of claims 1 to 5 or 9 when the instructions are executed by the computer or computers.

20 11. A computer data signal embodied in a carrier wave and representing instructions for causing one or more computers to perform the method according to any of claims 1 to 5 or 9 when the instructions are executed by the computer or computers.

25 12. A storage medium carrying computer readable code representing instructions for causing one or more computers to operate as the apparatus according to claim 6 or the system of claim 7 or 8 when the instructions are executed by the computer or computers.

30 13. A computer data signal embodied in a carrier wave and representing instructions for causing one or more computers to operate as the apparatus

according to claim 6 or the system of claim 7 or 8 when the instructions are executed by the computer or computers.